

In the Specification:

1. Please amend the Abstract as follows:

(Amended) Methods and systems for implementing high-performance data converters remove analog technology bottlenecks and provide higher converter resolution and higher speed using lower-performance converters and processing in the frequency domain. ~~A preferred embodiment of~~ The method comprises ~~the steps of~~ transforming a time domain input signal into a frequency domain signal in a digital form, processing the frequency domain signal and the input signal using at least two lower-performance data converters in order to obtain at least two processed signals, and recombining the at least two processed signals to obtain a final output signal from the high-performance converter. ~~Inventively and advantageously, the~~ The processing may include dividing the frequency domain into at least two frequency domain parts, one related to a low-resolution signal to noise ratio (SNR) and the other related to a high-resolution SNR, and using frequency information resulting from the division to obtain the at least two processed signals.

2. Please incorporate on page 1, line 1 of the specification the following:

Continuing Data

This application is a 371 of PCT/IL04/00767 filed on August 18, 2004, which claims benefit of US Provisional Application 60/496,326 filed August 18, 2003.

In the Drawings:

Please replace Figure 1 with a corrected Figure 1 labeled "Replacement Sheet".